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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,442	07/29/2003	Gerald L. McMillen	6497-100	9311

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EXAMINER	
GUIDOTTI, LAURA COLE	
ART UNIT	**PAPER NUMBER**
1744	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/630,442	MCMILLEN, GERALD L.	
	Examiner	Art Unit	
	Laura C. Guidotti	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-14 and 16-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *11* is/are allowed.

6)☒ Claim(s) *1,3-10,12-14 and 16-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1, 3-10, 13-14, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohrbacher, US 5,718,015 in view of Chayer, US 5,349,722.

Rohrbacher discloses the claimed invention including a fluid pump unit (30) for supplying cleaning fluid under pressure to the surface to be cleaned (Column 4 Lines 33-34) via a sprayer (54, 55), an elongated fluid collector (52, 62, 63) "physically separate" from the sprayer (as shown in Figure 3, sprayer 54, 55 is a separate entity than the fluid collector 52) for capturing waste fluid runoff of the cleaning fluid on the surface to be cleaned (Column 5 Lines 41-55), the fluid collector being substantially hollow throughout its length (as shown in Figure 3) and includes a perforated suction conduit (62; Figures 3 and 3A), a vacuum pump unit (310) for withdrawing captured waste fluid from the fluid collector (Column 5 Lines 51-57) via a hose (61) and recycling units (400, 403, 404, 500, 501, 20, 30, 41) for enabling the re-use of the withdrawn waste fluid (Column 4 Lines 14-25; Figure 7). Regarding claim 3, the recycling units include a holding tank unit (20) for storing cleaning fluid for the pump unit. Regarding claim 4, there is a settlement tank unit (400; or 403, 404) for receiving the captured waste fluid from the fluid collector (Figures 5-7). Regarding claim 5, there is a vacuum pump unit (310). Regarding claim 6, there is a separator (500, 501) that receives a waste fluid from the settlement tank to remove contaminants therefrom to provide a

clarified fluid to the holding tank (Column 7 Lines 45-50, Column 8 Lines 12-19). Regarding claim 7, the system further includes a fluid heating unit (40) capable of providing a heated cleaning fluid under pressure being supplied to the surface to be cleaned (Column 4 Lines 37-40). Regarding claim 8, the fluid heating unit (40) includes a fluid heating tank (40; as the unit is shown as a tank in Figure 1) for receiving fluid under pressure from the fluid pump unit (Column 4 Lines 55-57), and a burner for heating the fluid in the heating tank (Column 4 Lines 58-63). Regarding claim 9, there is a controller (switch, Column 4 Lines 58-63) capable of monitoring the temperature of fluid flowing into and out of the fluid heating tank and for controlling the burner should the temperatures of the fluid flowing into or out of the fluid heating tank is other than a desired temperature (Column 4 Lines 58-63). Regarding claim 10, the separator includes a separator tank (500 or 501) confining a filter pad therein (100; Column 7 Lines 45-50) having multiple layers composed of polypropylene fiber material (Column 6 Line 62 to Column 7 Line 35). Regarding claim 13, the vacuum pump unit *fluidly* includes an inlet (360) and a vacuum relief valve having a spring loaded valve member (Column 5 Line 64 to Column 6 Line 4, Column 6 Lines 31-38). Regarding claim 14, the settlement tank unit (400) includes at least one settlement tank (400) having an inlet (a fluid inlet at 425), the tank having a filter screen therein dividing the tank into at least two compartments (433), having a filter bag disposed "over" the settlement tank inlet (first filter bag 100 at the leftmost side fluidly over the inlet, see Figure 5), and having a sump pump (401) for discharging fluid from the settlement tank (Figure 7). Regarding claims 16-17, there is a perforated suction conduit (62) that has a set of angularly

disposed inlets (63), the inlets disposed at an angle from the vertical near the surface to be cleaned between *about* 10 and 20 degrees or *about* 15 degrees (as arranged in Figure 3; or a user may be capable of tipping the sprayer 50 so that the inlets are disposed in that range of angles). Regarding claim 18, the suction conduit is generally circular in configuration (as it is a ring, or has a circular diameter; Figures 3, 3A) and has an inside diameter of between about one inch and about 2.5 inches (Column 8 Line 49, 1" diameter). Regarding claim 19, an inside diameter (of the suction conduit) is *about* 1.5 inches (Column 8 Line 49, 1" diameter). The fluid collector of Rohrbacher does not include a perforated surge barrier, the suction conduit being disposed within the barrier.

Chayer discloses a fluid system that in particular teaches a fluid collector (22, 38) substantially hollow throughout its length and includes an elongated perforated surge barrier (38), the surge barrier is "general U-shaped" (Figure 6) and includes a seal extending along one edge of the surge barrier (46) to help retain the fluid within the surge barrier and prevent the barrier from moving (Column 8 Lines 36-47, 63-67) in order to prevent fluid from leaking (Column 8 Lines 36-47).

It would have been obvious for one of ordinary skill in the art to modify the fluid collector of Rohrbacher, to further include a surge barrier in which the suction conduit is retained within and including a seal, as Chayer teaches, in order to prevent fluid from leaking outside the bounds a desired area and to further control the pressure and amount of fluid being evacuated through the vacuum at once.

2. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rohrbacher, US 5,718015 and Chayer, US 5,349,722 as applied to claim 5 in view of Colt et al., US 3,831,223.

Rohrbacher and Chayer disclose all elements mentioned above, however do not disclose that that a blower has a discharge outlet including two mufflers connected in fluid communication with the discharge outlet.

Colt et al. teaches a similar cleaning system that includes a vacuum pump unit (55) including a blower (59) having a discharge outlet (outlet of 57 connected to 61, Figure 2), two mufflers connected in fluid communication with the discharge outlet (74, 75), a first muffler connected to the discharge outlet of the blower (74), and a second muffler (75) connected to an outlet of the first muffler (fluidly connected, see Figure 2) in order to keep pressure within the system at a minimum (Column 5 Lines 48-52).

It would have been obvious for one of ordinary skill in the art to modify the vacuum unit and blower of the system of Rohrbacher and Chayer for one that includes two mufflers connected in fluid communication with the discharge outlet, as Colt et al. teaches, in order to keep the pressure within the system at a minimum.

3. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohrbacher, US 5,718015 and Chayer, US 5,349,722 as applied to claim 1 in view of Ellison et al., US 4,723,337 and further in view of Wisdom, US 3,775,053.

Rohrbacher and Chayer discloses all elements mentioned above, however do not disclose a pair of inlet ports, discharge outlet, a tee, or pressure relief valve connected in fluid communication to the discharge outlet.

Ellison et al. includes a fluid pump unit (22) having a pair of inlet ports (from 24 and 35, Figure 2) and a discharge outlet (at 27, 28, 29), a tee (36) supplying fluid of both inlet ports (Figure 2), and a pressure relief valve connected in fluid communication with the discharge outlet (26; Figure 2). The fluid pump unit includes a bypass valve (at 26) for recirculating fluid from a discharge outlet from the pump unit (Figure 2; Column 2 Lines 47-54). Ellison et al. does not disclose that the fluid pump (which has a pressure range of 0 to 1000 psi, Column 2 Line 33) is specifically a positive displacement piston pump.

Wisdom teaches a fluid pump unit that has a positive displacement piston pump (Column 8 Lines 15-20) and is capable of delivering fluid in a range of 30 to 40 psi (Column 8 Line 17).

It would have been obvious for one of ordinary skill in the art to modify the fluid pump unit of Rohrbacher and Chayer to comprise a pump having a pair of inlet ports, discharge outlet, tee, and pressure relief valve in order to supply a high pressure of water, and further it would have been obvious for one of ordinary skill in the art to substitute the fluid pump of Rohrbacher, Chayer, and Ellison et al. for a positive displacement piston pump, as Wisdom teaches, as it is a known pump capable of delivering fluid at a pressure of 30 or 40 psi.

Response to Arguments

4. Applicant's arguments filed 26 January 2007 have been fully considered but they are not persuasive.

Rohrbacher does in fact include an elongated fluid collector physically separate from the sprayer, as the sprayer 54, 55 is a separate physical entity from the fluid collector, although they are attached. The fluid collector is considered to be "elongated" as it has a length dimension. In response to applicant's argument that the elongated fluid collector is *for resting along its entire length*, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The elongated fluid collector is capable of resting along its entire length on the surface to be cleaned on wheels, or is capable of removing its wheels. Also, as stated above the fluid collector is substantially hollow throughout its length and include a perforated suction conduit.

Allowable Subject Matter

5. Claim 11 is allowed.

The following is a statement of reasons for the indication of allowable subject matter:

None of the prior art made of record includes a fluid pump unit for supplying cleaning fluid under pressure to the surface to be cleaned, a fluid collector for capturing waste fluid runoff of the cleaning fluid on the surface to be cleaned, a vacuum pump unit for withdrawing captured waste fluid from the fluid collector, recycling units for enabling the re-use of the withdrawn waste fluid, the recycling units include a holding tank unit for storing cleaning fluid for the pump unit, a settlement tank unit for receiving the captured

waste fluid from the fluid collector, a vacuum pump unit, a separator that receives a waste fluid from the settlement tank to remove contaminants therefrom to provide a clarified fluid to the holding tank, wherein said separator including a separator tank confining a filter pad therein having multiple layers composed of polypropylene material, wherein the separator tank includes a perforated baffle, the filter pad being folded over the perforated baffle within an inlet compartment, and an outlet compartment communicating with the inlet compartment.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-

1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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GLADYS JP CORCORAN
SUPERVISORY PATENT EXAMINER